

WHAT IS CLAIMED IS:

1. An apparatus for reproducing information recorded on a disc, comprising:
  - a reading device that reads information recorded on said disc, wherein said reading device transmits a reproduction signal towards a said disc such that said reproduction signal reflects off of said disc to produce a reflected reproduction signal and wherein said reading device outputs a read signal based on said reflected reproduction signal; and
  - a controller which positions said reading device at a first position within a non-program area of said disc and instructs said reading device to focus said reproduction signal on said disc,
    - wherein said controller determines if said reading device is able to focus said reproduction signal on said disc by at least indirectly evaluating said read signal,
    - wherein, if said reading device is able to focus said reproduction signal on said disc, said controller determines if said read signal output from said reading device has a valid signal level when said reading device is positioned at said first position,
    - wherein, if said read signal does not have the valid signal level when said reading device is positioned at said first position, said controller moves said reading device to a second position within a program area of said disc while said reproduction signal remains focused on said disc, and
    - wherein said controller determines if said read signal output from said reading device has the valid signal level when said reading device is positioned at said second position.

2. The apparatus as claimed in claim 1, wherein said second position is closer to an outer circumference of said disc than said first position.

3. The apparatus as claimed in claim 1, wherein said disc comprises a lead-in area and a program area,

wherein said first position is located beneath said lead-in area and said second position is located beneath said program area.

4. The apparatus as claimed in claim 3, wherein said read signal does not have the valid signal level when said reading device is positioned at said first position and when said lead-in area does not contain any information.

5. The apparatus as claimed in claim 3, wherein said disc is a partially recorded CD-R.

6. The apparatus as claimed in claim 1, wherein, if said read signal output from said reading device has the valid signal level when said reading device is positioned at said first position, said controller determines that said disc is one of a completely recorded disc and a digital audio compact disc.

7. The apparatus as claimed in claim 1, wherein, if said read signal output from said reading device has the valid signal level when said reading device is positioned at said second position, said controller determines that said disc is a partially recorded disc.

8. The apparatus as claimed in claim 1, wherein, if said read signal output from said reading device does not have the valid signal level when said reading device is positioned at said second position, said controller determines that said disc cannot be reproduced.

9. The apparatus as claimed in claim 1, further comprising:  
an amplifier which amplifies said read signal at a gain to produce an amplified signal, wherein said gain has a first gain level,

5 wherein said controller determines if said read signal has the valid signal level when said reading device is positioned at said first position by at least indirectly evaluating said amplified signal.

10. The apparatus as claimed in claim 1, further comprising:  
an amplifier which amplifies said read signal at a gain to produce an amplified signal, wherein said gain has a first gain level,

5 wherein said controller determines if said read signal has the valid signal level when said reading device is positioned at said second position by at least indirectly evaluating said amplified signal.

11. ~~The apparatus as claimed in claim 1, wherein said valid signal level is a valid RF signal level.~~

12. An apparatus for reproducing information recorded on a disc,  
comprising:

a reading device that reads information recorded on said disc and outputs a corresponding read signal;

5           an amplifier that amplifies said read signal to produce an amplified signal; and

          a controller which positions said reading device at a first position within a non-program area of said disc and determines if said amplified signal output from said reading device has a valid signal level when said reading device is positioned at said first position by evaluating said amplified signal,

10          wherein, if said amplified signal does not have the valid signal level when said reading device is positioned at said first position, said controller moves said reading device to a second position within a program area of said disc,

          wherein said controller determines if said amplified signal output from said reading device has the valid signal level when said reading device is positioned at said second position.

13.       A method for reproducing information recorded on a disc, wherein a reproduction signal is irradiated towards said disc to produce a corresponding read signal, comprising:

- (a)       positioning said reproduction signal at a first position within a non-program area of said disc;
- 5           (b)      attempting to focus said reproduction signal on said disc;
- (c)      determining if said reproduction signal is focused on said disc by at least indirectly evaluating said read signal;
- (d)      if said reproduction signal is focused on said disc, determining if said read signal has a valid signal level when said reproduction signal is positioned at said first position;

15        (e) if said read signal does not have the valid signal level when said reproduction signal is positioned at said first position, moving said reproduction signal to a second position within a program area of said disc while said reproduction signal remains focused on said disc; and

      (f) determining if said read signal has the valid signal level when said reproduction signal is positioned at said second position.

14.      The method as claimed in claim 13, wherein said second position is closer to an outer circumference of said disc than said first position.

15.      The method as claimed in claim 13, wherein said disc comprises a lead-in area and a program area,

      wherein said first position is located within said lead-in area and said second position is located within said program area.

16.      The method as claimed in claim 15, wherein said read signal does not have the valid signal level when said reproduction signal is positioned at said first position and when said lead-in area does not contain any information.

17.      The method as claimed in claim 15, wherein said disc is a partially recorded CD-R.

18.      The method as claimed in claim 13, wherein said method further comprises:

*✓* (g) if said read signal has the valid signal level when said reproduction signal is positioned at said first position, determining that said disc is one of a  
5 completely recorded disc and a digital audio compact disc.

*✓* 19. The method as claimed in claim 13, wherein said method further comprises:

(g) if said read signal has the valid signal level when said reproduction signal is positioned at said second position, determining that said disc is a partially  
5 recorded disc.

20. The method as claimed in claim 13, wherein said method further comprises:

(g) if said read signal does not have the valid signal level when said reproduction signal is positioned at said second position, determining that said disc  
5 cannot be reproduced.

21. The method as claimed in claim 13, wherein said operation (d)  
comprises:

(d1) amplifying said read signal at a gain to produce an amplified signal,  
wherein said gain has a first gain level; and  
5 (d2) determining if said read signal has the valid signal level when said reproduction signal is positioned at said first position by at least indirectly evaluating said amplified signal.

22. The method as claimed in claim 13, wherein said operation (f) comprises:

(f1) amplifying said read signal at a gain to produce an amplified signal, wherein said gain has a first gain level; and

5 (f2) determining if said read signal has the valid signal level when said reproduction signal is positioned at said second position by at least indirectly evaluating said amplified signal.

23. A method for reproducing information recorded on a disc, wherein a reproduction signal is irradiated towards said disc to produce a corresponding read signal, comprising:

5 (a) positioning said reproduction signal at a first position within a non-program area of said disc;

(b) amplifying said read signal to produce an amplified signal; and

(c) determining if said amplified signal has a valid signal level when said reproduction signal is positioned at said first position by evaluating said amplified signal;

10 (d) if said amplified signal does not have the valid signal level when said reproduction signal is positioned at said first position, moving said reproduction signal to a second position within a program area of said disc;

(e) determining if said amplified signal has the valid signal level when said reproduction signal is positioned at said second position.

24. A software program contained on a computer readable medium which is executed by a controller that instructs a reproduction signal to be irradiated towards

a disc to produce a corresponding read signal, wherein the software program instructs the controller to perform the operations of:

- 5                   (a)     positioning said reproduction signal at a first position within a non-program area of said disc;
- (b)     attempting to focus said reproduction signal on said disc;
- (c)     determining if said reproduction signal is focused on said disc by at least indirectly evaluating said read signal;
- 10                  (d)     if said reproduction signal is focused on said disc, determining if said read signal has a valid signal level when said reproduction signal is positioned at said first position;
- (e)     if said read signal does not have the valid signal level when said reproduction signal is positioned at said first position, moving said reproduction signal to a second position within a program area of said disc while said reproduction signal remains focused on said disc; and
- 15                  (f)     determining if said read signal has the valid signal level when said reproduction signal is positioned at said second position.

25.     The software program as claimed in claim 24, wherein said second position is closer to an outer circumference of said disc than said first position.

26.     The software program as claimed in claim 24, wherein said disc comprises a lead-in area and a program area,  
                      wherein said first position is located within said lead-in area and said second position is located within said program area.

27. The software program as claimed in claim 26, wherein said read signal does not have the valid signal level when said reproduction signal is positioned at said first position and when said lead-in area does not contain any information.

28. The software program as claimed in claim 26, wherein said disc is a partially recorded CD-R.

29. The software program as claimed in claim 24, wherein said software program further instructs the controller to perform the operations of:

(g) if said read signal has the valid signal level when said reproduction signal is positioned at said first position, determining that said disc is one of a completely recorded disc and a digital audio compact disc.

30. The software program as claimed in claim 24, wherein said software programs further instructs the controller to perform the operations of:

(g) if said read signal has the valid signal level when said reproduction signal is positioned at said second position, determining that said disc is a partially recorded disc.

31. The software program as claimed in claim 24, wherein said software program further instructs the controller to perform the operations of:

(g) if said read signal does not have the valid signal level when said reproduction signal is positioned at said second position, determining that said disc cannot be reproduced.

32. The software program as claimed in claim 24, wherein said operation  
(d) comprises:

- (d1) amplifying said read signal at a gain to produce an amplified signal,  
wherein said gain has a first gain level; and  
5 (d2) determining if said read signal has the valid signal level when said reproduction signal is positioned at said first position by at least indirectly evaluating said amplified signal.

33. A software program contained on a computer readable medium which is executed by a controller that instructs a reproduction signal to be irradiated towards a disc to produce a corresponding read signal, wherein the software program instructs the controller to perform the operations of:

- 5 (a) positioning said reproduction signal at a first position within a non-program area of said disc;  
(b) amplifying said read signal to produce an amplified signal; and  
(c) determining if said amplified signal has a valid signal level when said reproduction signal is positioned at said first position by evaluating said amplified signal;  
10 (d) if said amplified signal does not have the valid signal level when said reproduction signal is positioned at said first position, moving said reproduction signal to a second position within a program area of said disc;  
(e) determining if said amplified signal has the valid signal level when  
15 said reproduction signal is positioned at said second position.